

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method for determining a test suite for a current software build, comprising:
 - obtaining a current software build;
 - obtaining a reference software build;
 - comparing the current software build to the reference software build to identify areas of the current software build that have been modified with regard to the reference software build; and
 - selecting a focused test suite from a master test suite according to the identified areas, such that a test in the focused test suite, when executed, will exercise at least one identified area of the current software build that has been modified with regard to the reference software build.
2. The method of Claim 1 further comprising generating information identifying areas of the current software build that have been modified with regard to the reference software build that cannot be exercised by at least one test in the master test suite.
3. The method of Claim 1, wherein the current software build is compared to the reference software build according to the modification dates of corresponding source files found in both the current software build and the reference software build.
4. The method of Claim 1, wherein the current software build is compared to the reference software build by comparing the executable codes for a routine found in both the current software build and the reference software build.
5. A computer system for determining a test suite for a current software build, the system comprising:
 - a processor; and
 - a memory, wherein the memory stores:
 - a reference software build;
 - a master test suite comprised of tests for testing the current software build;

a comparison module which, when executed by the processor, obtains the current software build and compares it to the reference software build, identifying those areas of the current software build that have changed with regard to the reference software build; and

an analysis module, which when executed by the processor, determines a focused test suite from the master test suite according to the identified areas of the current software build that have changed with regard to the reference software build.

6. The system of Claim 5, where the analysis module further identifies those areas of the current software build that have been modified with regard to the reference software build that cannot be exercised by at least one test in the master test suite.

7. The system of Claim 5, wherein the comparison module compares the current software build to the reference software build according to the modification dates of a source file common to both the current software build and the reference software build.

8. The system of Claim 5, wherein the comparison module compares the current software build to the reference software build according to the executable codes for a routine common to both the current software build and the reference software build.

9. A method for testing a current software build, comprising:
obtaining information relating to a current software build;
obtaining information relating to a reference software build;
comparing information relating to the current software build to information relating to the reference software build to identify areas of the current software build that have been modified with regard to the reference software build;

selecting a focused test suite from a master test suite according to the identified areas, such that the focused test suite will exercise the identified areas of the current software build that have been modified with regard to the reference software build when executed; and

testing the current software build using the focused test suite.

10. The method of Claim 9 further comprising generating information identifying areas of the current software build that have been modified with regard to the reference software build that cannot be exercised by at least one test in the master test suite.

11. The method of Claim 9, wherein information relating to the current software build is compared to information relating to the reference software build according to the modification dates of corresponding source files found in both the current software build and the reference software build.

12. The method of Claim 9, wherein information relating to the current software build is compared to information relating to the reference software build by comparing the executable codes for a routine found in both the current software build and the reference software build.

13. A computer system for testing a current software build, the system comprising:

a storage means that stores a reference software build, and also stores a master test suite comprised of tests for testing the current software build;

a comparison means that obtains the current software build, compares the reference software build to the current software build, identifying those areas of the current software build that have changed from the reference software build;

an analysis means that determines a focused test suite from the master test suite according to the identified areas of the current software build that have changed from the reference software build; and

a test means that exercises the focused test suite on the current software build.

14. The system of Claim 11, where the analysis means further identifies those areas of the current software build that have been modified with regard to the reference software build that cannot be exercised by at least one test in the master test suite.

15. The system of Claim 11, wherein the comparison means compares the current software build to the reference software build according to the modification dates of a source file common to both the current software build and the reference software build.

16. The system of Claim 11, wherein the comparison means compares the current software build to the reference software build according to the executable codes for a routine common to both the current software build and the reference software build.

17. A computer-readable medium bearing computer-readable instructions which, when executed, carry out the method comprising:

obtaining a current software build;

obtaining a reference software build;

comparing the current software build to the reference software build to identify areas of the current software build that have been modified with regard to the reference software build; and

selecting a focused test suite from a master test suite according to the identified areas, such that the focused test suite will exercise the identified areas of the current software build that have been modified with regard to the reference software build when executed.

18. The method of the computer-readable medium of Claim 17 further comprising testing the current software build using the focused test suite.

19. The method of the computer-readable medium of Claim 17 further comprising generating information identifying areas of the current software build that have been modified with regard to the reference software build that cannot be exercised by at least one test in the master test suite.

20. The method of the computer-readable medium of Claim 17, wherein the current software build is compared to the reference software build according to the modification dates of corresponding source files found in both the current software build and the reference software build.

21. The method of the computer-readable medium of Claim 17, wherein the current software build is compared to the reference software build by comparing the executable codes for a routine found in both the current software build and the reference software build.